Differential Amplifier

LNA + ATTN Bypass (short circuit SJ4 after U3, R4,R5,R6 removed)

LNA

10dB attenuation

Chebychev 14MHz LPF

VDD_3V3

C1 100nF C3 100nF C2 10uF C4 10uF

GND

SJ2

R_F1 1k

C8 220nF → DIRECT_SAMPLING+ → RF+

U3
BGA416, LNA

L1 47uH

C_DC2 220nF

R9 180

R7 500

C5 220nF → DIRECT_SAMPLING- → RF-

SMA1
SMA_EDGE

C_DC0 220nF

1 GND RFOUT 4

2 RFIN GND2 3

R4 100 R6 75 R5 100

C_DC1 220nF

R_F 59

3 VS+   VOUT+ 4
1 VIN-
8 VIN+
7 ~PD   VOUT- 5
2 VOCM
6 VS-

U1 THS4521ID

C10 330p

C9 N.F

L7 0.56uH

C6 N.F

L6 0.56uH

C7 680p

C21 330p

GND GND GND GND

GND

GND GND

GND

C20 220nF

GND GND

R_F2 1k

ESD1

220 R8

GND

GND

Voltage Regulator

B+

B-

GND

VDD_BAT

U2
TPS73601DBVR

printed SJ3

C50 1uF

C11 220nF

3 EN   OUT 5
4 NR/FB
1 IN
2 GND

SJ1

2 VDD_3V3
1

LED1

470 R3

GND

R1 52.3k

C49 1uF

GND

R2 30.1k

GND GND GND

R21 and R22 setup the output voltage.

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